

REMARKS

I. Status of Claims

Claims 1-10, 12-18, 23-34 and 37-44 are currently pending. Claims 1, 37, 39 and 41 are currently amended. The Examiner has withdrawn from consideration claims 13, 15, 23-29, and 37-44, and claims 11, 19-22, 25, 26, 35, and 36 were previously cancelled by Applicants. Thus, claims 1-10, 12, 14, 16-18, and 30-34 are under consideration on the merits.

As shown, independent claims 1, 37, 39 and 41 are amended to further define the claimed silicone as having a kinematic viscosity of $1 \times 10^{-5} \text{ m}^2/\text{s}$ to $1 \text{ m}^2/\text{s}$. Support for these amendments can be found, for example, at paragraph [0148] of the specification as published. Accordingly, Applicants submit that the above amendments raise no issue of new matter, and are fully supported by the original disclosure. The Examiner's remarks in the Advisory Action dated April 22, 2009, have been rendered moot by the filing of the above amendments. Thus, the Advisory Action and the remarks therein are not addressed in this response.

II. Rejections under 35 U.S.C. § 103(a)

In the final Office Action of February 18, 2009, the Examiner rejected claims 1-10, 12, 14, 16-18, and 30-34 as allegedly unpatentable over Murray¹, Sweger², Babenko³, Saint Leger⁴, and Harashima⁵ for the reasons of record. See Office Action at

¹ Murray, U.S. Patent No. 5,720,964, issued February 24, 1998.

² Sweger et al., U.S. Patent No. 5,482,704, issued Jan. 9, 1996.

³ Babenko, U.S. Patent No. 6,277,893, issued Aug. 21, 2001.

⁴ Saint Leger, U.S. Patent No. 5,919,438, issued July 6, 1999.

⁵ Harashima, European Patent Specification No. 0 268 981 B1, published March 25, 1992.

2-6. Applicants continue to disagree with this rejection, and respectfully submit that the claims as amended are not *prima facie* obvious for at least the following reasons.

Murray was cited as the primary reference in the obviousness rejection. Murray states, in relevant part:

Advantageously the viscosity of the dimethiconol lies in the range 1-20 million cst because higher viscosity increases the conditioning effect obtainable from the silicone. *Col. 4, ll. 63-65.*

Thus, Murray teaches away from compositions comprising dimethiconol with low viscosity. In view of this teaching, one of ordinary skill would not formulate the compositions of the claims as amended, which comprise “at least one non-volatile polyorganosiloxane with a kinematic viscosity of 1×10^{-5} m²/s to 1 m²/s,” because Murray teaches that “higher viscosity increases the conditioning effect obtainable from the silicone.” (Note that the conversion factor from cst to m²/s is 1 m²/s per 1 million cst.) Thus, the person of ordinary skill seeking to modify and improve the composition of Murray would avoid the polyorganosiloxane range of the compositions of the claims as amended because this person would expect them to have a lesser conditioning effect.

This notion finds further support at the very beginning of the disclosure of Murray:

This invention relates to hair conditioning compositions containing non-volatile insoluble silicone gum, particularly dimethiconol gum. *Col. 1, ll. 5-7.*

Thus, the use of silicone gum is a defining feature of the invention disclosed by Murray. Gums, as the name would suggest, are quite viscous materials.

There is also no teaching or suggestion that other silicones are equivalents of the gum chosen by Murray as the defining feature of its disclosed invention. In the

Examples of Murray, only dimethiconol is mentioned as a specific type of silicone that was actually used in the disclosure of Murray. *Id.* at col. 6, ll. 41-44. Murray states,

The two attributes considered to be most indicative of conditioning benefit are (a) ease of dry combing and (b) smooth feel of the hair when dry. Comparative example A was found to be equivalent to the control in both tests. Example 1 was found to be superior to the control in both tests. This shows that the emulsion polymerized dimethiconol material of example 1 has superior hair conditioning properties to the mechanically emulsified silicone of comparative example A. Col. 6, ll. 36-44.

Thus, Murray is deficient as a reference against the compositions of the claims as amended, in that it guides one of ordinary skill in the art away from formulating a composition meeting all limitations of the claims. This deficiency can not be remedied by Sweger, Babenko, Saint Leger, or Harashima for a number of reasons, not the least of which is that they would necessarily form an improper combination rejection with Murray. It is improper to combine references if their combination would result in the destruction of the intended operation or if a reference teaches away from the claimed invention. See, *In re Laskowski*, 10 USPQ 2d 1397 (Fed. Cir. 1989).

Even if they could properly be combined with Murray, their combined teachings would not render obvious the claimed invention. For example, Sweger and Babenko do not discuss silicone viscosity at all, and therefore can provide no reason why one of ordinary skill would not follow Murray. The only disclosure of Saint Leger concerning silicone or silicon is the use of "Silicon gum marketed under the trademark QC F2-1671 by Dow Corning" in Example 3. *Saint Leger* at col. 4, ll. 56-57. The use of such a gum is consistent with the teaching of Murray and would not lead one of ordinary skill to deviate therefrom. Applicants courteously point out that Harashima represents an

attempt to solve a problem related to instability through the use of emulsion polymerization:

However, even cosmetics obtained by emulsification using the above specific surfactants suffer from a lack of long term stability due to the organopolysiloxane emulsion having an average particle size above 0.2 micrometers. As a consequence, when blended with other cosmetic starting materials, the organopolysiloxane will separate out during long-term storage. . . . The object of the present invention is to eliminate the aforesaid problem by providing a cosmetic which is based on an organopolysiloxane microemulsion prepared by emulsion polymerization, and which has excellent storage stability. *Harashima at 2, ll. 20-23, 28-30.*

The use of emulsion polymerization is consistent with the disclosure of Murray. See, e.g., *Murray at col. 1, ll. 15-16*, citing EP 0 268 982 (Toray)⁶. Again, the disclosure of Harashima, which preceded that of Murray, would not motivate or suggest deviation from the teaching of Murray.

For at least the foregoing reasons, Applicants respectfully submit that the cited references do not support a *prima facie* case of obviousness against Applicants' claims as amended. Given that Murray teaches advantages of high viscosity and that the secondary references are either consistent with or irrelevant to this feature, there is no credible explanation of how one of ordinary skill in the art would arrive at the invention of Applicants' claims as amended. Applicants therefore aver that the 35 U.S.C. § 103(a) rejection is improper in view of the pending claims, and should be withdrawn.

⁶ Toray is the applicant to which the European patent for the invention of Harashima et al. issued.

CONCLUSION


In view of the foregoing amendments and remarks, Applicant respectfully requests reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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